

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number  
**WO 2004/001009 A2**

- (51) International Patent Classification<sup>7</sup>: C12N (74) Agent: MARSCHANG, Diane, L.; Genentech, Inc., MS 49, 1 DNA Way, South San Francisco, CA 94080-4990 (US).
- (21) International Application Number: PCT/US2003/019750 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 23 June 2003 (23.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/391,050 24 June 2002 (24.06.2002) US (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): GENENTECH, INC. [US/US]; 1 DNA Way, South San Francisco, CA 94080 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): HYMOWITZ, Sarah [US/US]; 1501 Beach #301, San Francisco, CA 94123 (US). KELLEY, Robert, F. [US/US]; 1029 San Felipe Avenue, San Bruno, CA 94066 (US). LINDSTROM, Stephanie, Ho [US/US]; 20 Queen Anne Court, Millbrae, CA 94030 (US).
- Published:**  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

BEST AVAILABLE COPY

(54) Title: APO-2 LIGAND/TRAIL VARIANTS AND USES THEREOF

(57) Abstract: The disclosure provides Apo-2 ligand variant polypeptides. Methods of making and chemically modifying Apo-2 ligand variant polypeptides are also provided. In addition, formulations of Apo-2 ligand variant polypeptides are provided. In addition, therapeutic methods for using Apo-2 ligand variant polypeptides are provided.

WO 2004/001009 A2